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SURGICAL CLINIC

...AT...

ST. MARY'S HOSPITAL,

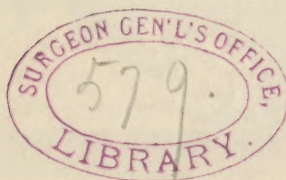
SEPTEMBER 23D, 1896.

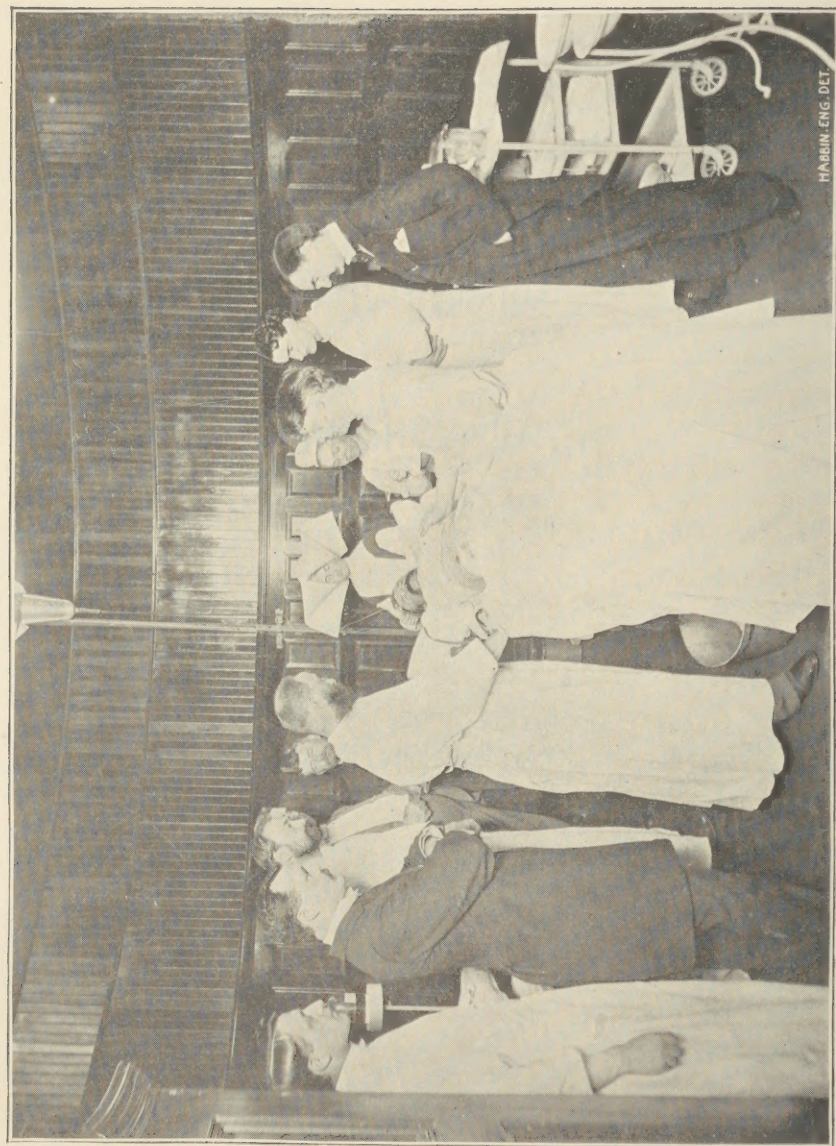
...BY...

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OPERATION FOR APPENDICITIS.
ST. MARY'S HOSPITAL AMPHITHEATRE.

SURGICAL CLINIC AT ST. MARY'S HOSPITAL,

SEPTEMBER 23rd, 1896.

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UMBILICAL HERNIA.

Gentlemen,—At this, our first clinic of the college term, I have a number of interesting cases to show you.

Case 1. Mrs. L., aged 43, gives a history of a mild form of asthma for several years, and during one of her coughing fits about seven years ago she was taken with a sudden pain at the umbilicus which lasted for only a short time. Shortly after this she noticed a small protrusion, which has gradually increased to the size which you now see it. (Fig. 1.) Her abdomen is pendulous and very obese. The protrusion is partially reducible and undoubtedly adherent. As she has never had any evidence of strangulation, it is quite probable that the contents of the sac is omentum.

Umbilical hernia in adults is very different from that in children and does not promise very much in the way of mechanical treatment. It is rarely necessary to operate in children, as the hernia is almost always reducible and can be easily cured in a

few months by the proper application of a truss. In adults the pathological conditions as a rule prevent complete reduction. You will observe, as already stated, that the adhesions are such that I am able to effect only a partial reduction in this case.

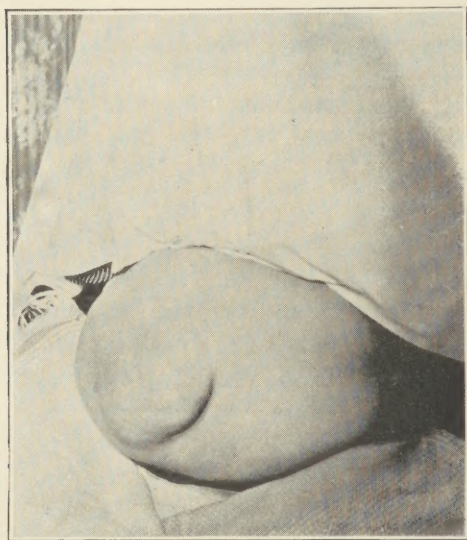


FIG. 1.

Not infrequently we have an addition to the true umbilical hernia by an extra protrusion of an intestine in close proximity, known as "para-umbilical." Such a one I operated upon yesterday for Prof. J. E. Clark, in which existed a hernia not only at the umbilicus, but also just above it, which was strangulated, necessitating immediate surgical interference. Our patient

has worn a variety of trusses and abdominal supports without benefit. She is unable to follow her avocation, that of a cook, and for that reason has come to us for the purpose of a permanent reduction and closure. Statistics of the results of radical operations for the cure of this variety of herniæ are limited, and so far as known the relapses are proportionately more frequent than in either inguinal or femoral hernia. There is good reason that this should be so, from the fact that the fasciæ and muscles in close proximity to the median line have become atrophied from the long pressure and have therefore not the power of resistance that is found in the other forms of hernia. The purpose of a radical cure of any form of hernia is to so make the operation that the parts may be put in the best condition and position for approximation and healing. We will first make an elliptical incision, removing both the umbilicus and redundant skin. The excision of the sac is a matter of expediency, for if we find that it is exceedingly large and adherent, it will be best to excise it and approximate the divided peritonæum with cat-gut sutures, and then by the best method (if there is such a method) possible, complete the operation. Let me state here that suturing the deep parts, and superficially packing with gauze and allowing it to heal by aseptic granulation, is not an ideal operation. You will observe that I

have liberated all the adhesions to the peritoneum, and I can now readily return the sac and its contents into the abdominal cavity. The only point of the peritoneum to be sutured is the opening that I made through it when removing the umbilicus. After carefully cutting away the fibrous edges of the ring so as to fully expose the fibres of the recti muscles, I will proceed to bring them together with a continuous No. 24 silver wire suture in the following manner. (Fig. 2.) Commence at the lower



FIG. 2.

end of the wound, upon the left side, and introduce the needle longitudinally upwards about a quarter of an inch through the full thickness of the muscle, using care not to pierce the peritoneum; then crossing over

superiorly to the right side, piercing the opposite muscle as before, and then back to the left, and so on, until the upper end of the wound is reached, when the needle is pushed upward out through the integument about an inch above the apex of the wound. You will notice that I have left three or four inches of the lower end of the suture free, which is threaded and the needle passed out through the integument as above. By traction at each end of the wire you will observe further that the edges are inverted slightly and accurately coapted. The ends of the wire are held firmly by passing them through an inch of quarter-inch rubber tubing and winding them two or three times around it, making a sort of elastic traction. (Fig. 3.) The edges of the integument are now brought together with interrupted silkworm gut sutures. (Fig. 4.) The object in introducing and adjusting the wire suture in the manner just described is that it may be cut off at either end and withdrawn when it is thought that the union has become firm, say, at the expiration of from four to six weeks. It will be seen, therefore, that the wire is only a temporary buried suture. Buried sutures are objectionable, from the fact that they are foreign bodies and are liable to produce trouble necessitating their removal at some future time, except, perhaps, in the instance of cat-gut, which is usually rapidly absorbed,

and is therefore defective where prolonged apposition is necessary to insure firm union. I have been compelled frequently to remove buried sutures of silk, silkworm gut, silver wire, and last year I had occasion to remove a kangaroo tendon suture that had been buried for nearly five months, and had



FIG. 3.



FIG. 4.

begun to produce trouble. An ideal suture is one that can be removed after it has performed the office wanted of it. A varied experience in the use of a variety of sutures has led me to the opinion that cat-gut and silkworm gut have served me the best, except in a few instances as above, silver wire has done effective work.

REMOVAL OF A LEFT-SIDED GOITRE.

Case 2. Mr. E., aged 53 years, has had this left-sided goitre for 28 years, which has not given him much inconvenience until

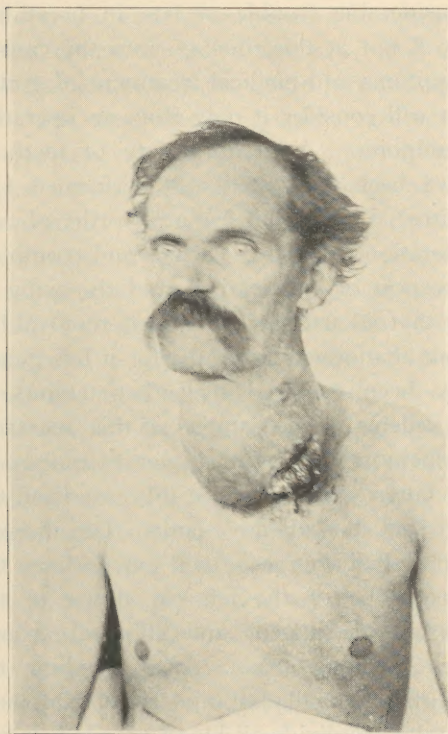


FIG. 5.

about two years ago, when its pressure caused at times difficult breathing and a stridulous voice when talking. The usual internal and external remedies have been of no avail. Some months ago an injection

of some sort was used, followed by supuration, and there is now, as you observe, a large pultaceous mass extruding at the point where the injection was made. (Fig. 5.) He is emaciated somewhat and has considerable trouble of late in breathing. I will not at this time go into the causes, symptoms and medical treatment of goitre, but will consider it only from an operative standpoint. A great variety of methods have been suggested and performed for goitre, of which but few are worthy of consideration, namely, partial and complete resection or enucleation, and the tying of the thyroid arteries. Complete removal has been abandoned as a rule, for it has generally been followed by either tetanus or myxedema. The dangers of this operation are hemorrhage, injury to nerves and sepsis, the latter extremely so in this case from the fact that it is already septic. The incision that I shall first make will extend from the lower lobe of the left ear down to the sternum (S-shaped) and elliptical around the extruding mass. After dividing the integument and platysma, great care must be taken to divide all blood vessels between ligatures. Next comes the fasciæ, which is divided, exposing the sterno-cleido-mastoid and sterno-laryngeal muscles. It will be necessary to sever the laryngeal muscles and nick the anterior border of the sterno-cleido-mastoid, when the tumor will be fully

exposed. Traction with large blunt hooks gives opportunity for deeper inspection and division of the sterno-thyroid and sterno-hyoid. The next step is the division and reflection of the gland capsule, and ligating and dividing each blood vessel as it appears in the course of the dissection. We are now enabled to pull the gland forward, and from this time on the greatest care must be exercised not to injure the recurrent laryngeal nerve, or the cardiac branches of the sympathetic. In tying the inferior thyroid artery make certain it is thoroughly isolated. Our dissection is now far enough advanced so that we can encircle the isthmus with a stout cat-gut ligature and divide it. Now comes the most delicate part of this operation—that is, the separation of the gland from the trachea—for even with the greatest care the recurrent laryngeal nerve may be injured; therefore, in order not to do so, I will transfix and double ligature the tumor just above its attachment to the capsule, then cutting it away above the point of ligature, leaving that portion with the capsule, as in this way there is less liability of injury to the nerve. Having made certain that all bleeding points have been tied, and divided muscles sutured, the wound is usually closed without drainage, but in this instance I will feel better if drainage tubes are inserted, owing to the primary sepsis.

This tumor is of the fibrous variety, and

since removing it Dr. E. H. Troy has been kind enough to make a section of it with the following report: "The piece of this tumor chosen for examination was adjacent



FIG. 6.

to the suppurating point, and the reason for doing so was that in the event of malignant changes taking place we would expect to find it there because of the tendency of malignant growths to break down. No

malignant change found. A proliferation of epithelium which looks suspicious was observed in a few sections, but was not sufficiently characteristic to be called carcinomatous."

CIRCULAR CRANIECTOMY FOR MICROCEPHALY.

Case 3. Mabel B., aged 8 years, is very small for her age with a proportionately smaller head, has a history of being fairly bright until she was nearly a year old, when she gradually developed imbecility. Her parents have no knowledge that she ever received an injury to the head, or that she ever had any severe illness. She presents now all the characteristics of an idiot, namely, strabismus, numerous exaggerated muscular movements, involuntary discharges of secretions and excretions, frequent semi-convulsions and aphasia, making an almost constant crooning noise while awake. Your teacher on nervous diseases, Prof. D. Inglis, will undoubtedly go more into details as to the causes of the interference with intracranial development than time will now permit. Suffice to say that imbecility, idiocy and other mental defects may be due to various acute or chronic inflammatory diseases of the brain and its coverings, defective congenital brain development, neoplasms, traumatism and extreme premature ossification of the skull. After careful observation of this child for several days, I

am inclined to the opinion that we have here a case of microcephaly, and, if I am correct in my conclusions, sufficient cause for the train of symptoms that are here present, that is, the influence of the pressure of a non-expanding skull upon an expanding brain. Lannelongue was the first to point out the possibility of benefit to be derived from surgical interference in this class of cases, since which time several others have presented papers for and against operation. However, many cases have been reported that have been much benefited by craniectomies. In three cases that I have operated upon with the view of remedying a mental defect, the results have been nil. One in a young girl of 17 years of age, with epilepsy and great mental irritability, improved very materially for a time, but has since gradually relapsed until now she is an inmate of an insane asylum. The other two operations were upon idiot children from birth, of three and five years of age, without any appreciable improvements whatever. The want of improvement in these cases I have attributed somewhat to my method and to little removal of the cranial vault. If we are to expect freedom of expansion of the brain, it will be necessary to remove a considerable portion of the cranial vault, or make a large osteoplastic flap of the same. Following my last operation, which occurred nearly a year

ago, I determined, if ever opportunity presented again, to do more than a linear craniectomy, that is, make a circular ditch in the cranial vault, an idea that I considered original at the time, but I find in looking up the literature of craniectomy that Gersundy suggested a similar procedure in 1892 and is called by him circular craniotomy, which exemplifies the familiar saying, "Nothing new under the sun."

Yesterday the child's head was shaved, washed, and a soap poultice applied and retained with a bi-chloride gauze cap. Before proceeding with the operation, we shall control hemorrhage as much as possible by applying rubber tubing around the head, holding it in place by four sutures, one behind and below the occipital protuberance, the second in front of the superciliary ridge, and the others just above each ear, which fixes it so it cannot slip, and is well out of the way of the field of the operation. Two elliptical incisions are now made through the scalp, with the convexity of each below the parietal eminence, leaving an isthmus in front of the coronal suture and one behind the lambdoid suture. (Fig. 7.) The scalp with the periosteum is reflected upwards, and we are now ready for the removal of the wide strip of bone. I usually make a starting point with a small trephine and complete the work with Keen's rongeur, but I have here a set of much

superior instruments, namely, De Vilbiss' rotary bone drill and rongeur. The drill makes 1,200 revolutions per minute if required. You will observe I have made a circular ditch in the skull on each side.



FIG. 7.

and the removal is completed under each isthmus of the scalp by the rongeur. I have now removed a circular strip of bone nearly an inch in width without injuring either the dura mater or longitudinal sinus, and have left the island of bone attached to the scalp. Hemorrhage has been slight owing to the efficient manner of controlling it, and before

removing the rubber tubing I shall coapt the wound with silkworm gut sutures and irrigate with a hot normal salt solution so as to prevent oozing. I shall, however, introduce a small strip of gauze on each side of the lower isthmus to provide for any oozing that may occur, and apply the gauze cap, which completes the operation. You will observe that the skull was fully a quarter of an inch in thickness. By this method of procedure we have given the greatest opportunity for brain expansion, and hope for some improvement in the mental condition of this child.

TUBERCULAR ABSCESS OF THE HIP JOINT.

Case 4. G. L., age 13, has been under my observation for nearly a year. His mother brought him to me with pronounced symptoms of disease of the left hip joint in the first stage. He was treated by fixation of the joint with a plaster of paris splint extending from the ankle to above the umbilicus, with an elevated shoe upon the well foot, permitting him to walk about on crutches. This treatment after several months seemed to effect a permanent cure. About a month ago evidence pointed to a return of the difficulty, and about a week ago his mother brought him back with the appearances shown to you today (Fig. 8), namely, knee flexion, slight inversion of the foot, prominence of the hip, limited and

painful motion of the hip joint, and a prominent bulging midway below Poupart's ligament, extending somewhat downwards. Diagnosis, second stage with abscess of the



FIG. 8.

acetabular variety, probably communicating with the pelvic cavity. Though, as a rule, abscesses below Poupart's ligament do not communicate with the pelvic

cavity, yet, authorities differ in this respect, and in this case can be determined only by opening and exploration. As this abscess has undoubtedly ruptured with a marked tendency to burrowing, it would be proper to open, wash out, dress antiseptically, and be prepared to remove sequestra and make an excision if necessary. The incision is made obliquely downwards and inwards parallel with Poupart's ligament, between three and four inches in length, so as to permit a thorough evacuation and inspection. As I predicted, I find the abscess within the pelvic bones, but I am unable to find any sequestra, but enough erosion to justify thorough curettment of the perforations through the acetabulum. We will now irrigate copiously with a 1-2000 bi-chloride solution, following it with a normal salt solution, thoroughly dry the cavity with gauze, mop out with an iodoform emulsion, pack and seal with strips of iodoform gauze, first, however, putting in two or three silkworm gut sutures so as to lessen the size of the opening. The after treatment will consist in removing from time to time the gauze, and re-packing as occasion requires. We have presumed that this case is tubercular, and will direct that he receive injections of nuclein daily, commencing with 10 drops and gradually increasing it to 50. My reasons for prescribing nuclein are that I have found it to

be a valuable adjuvant to surgical interference in tubercular joint troubles.

SUPPLEMENTARY REPORT.

Case 1 made an uneventful recovery and the wire was removed on the thirty-sixth day following the operation.

Case 2 suffered considerable shock for about forty-eight hours and after this made gradual improvement without sepsis, leaving the Hospital on the twenty-ninth day, the wound all healed with the exception of a small place which had to heal by granulation from the fact that the integument was insufficient to cover the wound at the time of operation.

Case 3 left the Hospital on the twenty-ninth day, the wound entirely healed but with little apparent improvement in the mental condition. Improvement, as far as cases that have been reported, has been slow and very gradual, so that if improvement does occur it will be a matter of the future. The child will be kept under observation and conditions from time to time noted.

Case 4. The result has been much better than was anticipated. When last heard from the wound had healed completely.



THE FIRST GRADUATING CLASS OF THE ST. MARY'S HOSPITAL TRAINING SCHOOL FOR NURSES, OCTOBER 8TH, 1896.

